

SMITHFIELD WWTF

Built in 1978, Smithfield's wastewater facility discharges into the upper Woonasquatucket River. Because of the sensitive nature of the receiving waters, Smithfield has some of the lowest year-round permit limits in the state. While the facility routinely receives high marks for operation and maintenance, a series of violations resulted this year in a rating of "poor". Recent and future upgrades to the plant will better help the facility discharge a low level of pollutants to the Woonasquatucket. Smithfield's facility, staffed by six operators and mechanics, is operated by Professional Services Group/US Filter.



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 Smithfield, RI 02917
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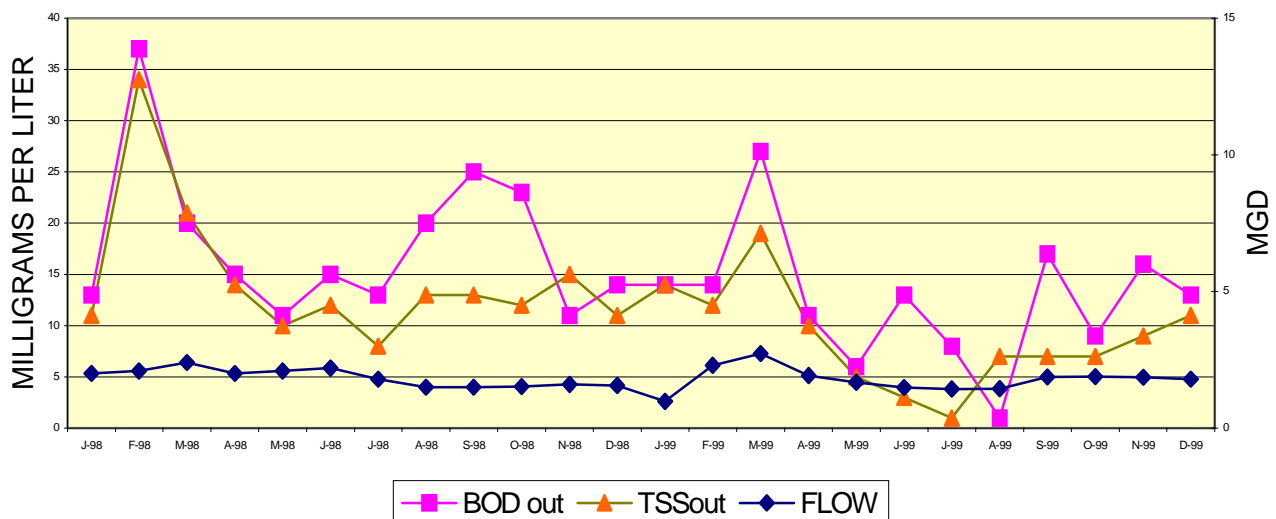
CURRENT AND FUTURE CONCERNS

Smithfield's new permit became effective March 1, 2000. The new permit added limits for ammonia and phosphorus to address low oxygen levels and excessive weed growth in the Woonasquatucket River, and the requirement to reduce total nitrogen. RIDEM and the Town hope to enter a consent agreement with interim limits for ammonia, phosphorus, copper and zinc and schedules for achieving compliance.

Overall Treatment: Poor

Having no monthly violations for flow, or fecal coliform but 8 violations for BOD (February, March, August, September, October and November 1998 and March and November 1999) and two TSS violations (February and March 1998), as well as Daily Maximum violations for BOD and TSS, Smithfield received a rating of Poor.

SMITHFIELD EFFLUENT DATA - 1998/1999



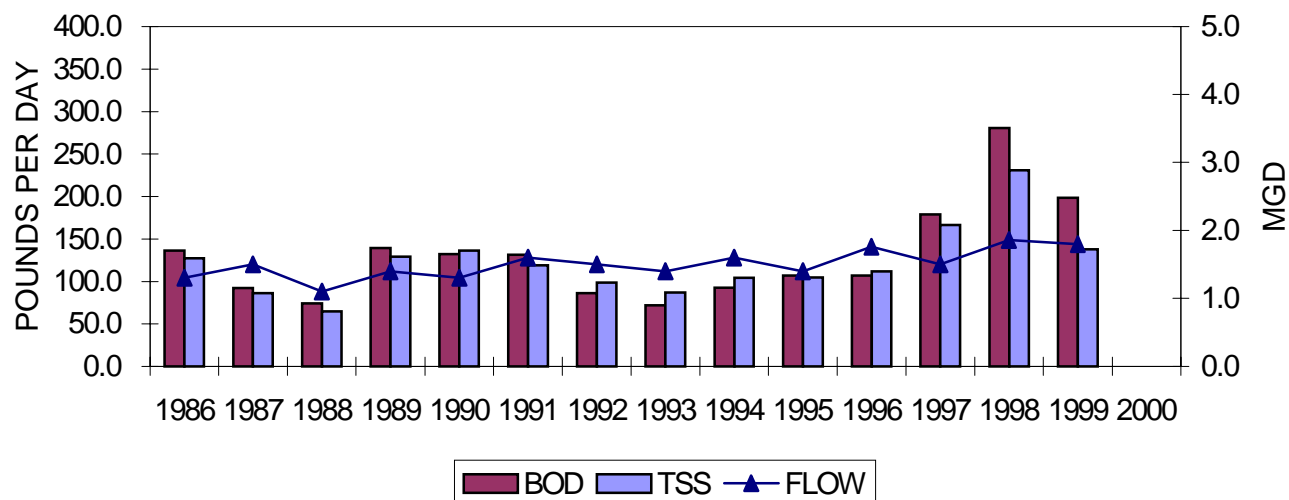
BEGAN OPERATION 1978

ANNUAL SURVEY

PARAMETER	1996	1997	1998	1999	PERMIT LIMIT	VIOLATIONS 1998/1999
FLOW (MGD)	1.8	1.5	1.9	1.8	3.5	0/0
BOD INFLUENT (MG/L)	210.6	242.8	201.8	243.7		
BOD EFFLUENT (MG/L)	7.2	13.8	18.1	11.3	15	6/2
BOD INFLUENT (LBS./DAY)	3062.5	3072.5	3062.7	3612.4		
BOD EFFLUENT (LBS./DAY)	106.9	178.8	280.2	184.5		
BOD % REMOVAL	96.5	94.3	90.9	95.4		
TSS INFLUENT (MG/L)	186.3	193.8	171.8	201.6		
TSS EFFLUENT (MG/L)	7.6	13.3	14.5	8.8	15	2/0
TSS INFLUENT (LBS./DAY)	2711.7	2459.7	2609.3	3024.6		
TSS EFFLUENT (LBS./DAY)	111.8	166.1	230.7	141.3		
TSS % REMOVAL	95.9	93.2	91.2	95.6		
FECAL COLIFORM (MPN/100ML)	3.0	6.3	1.7	2.9	200.0	0/0
CHLORINE RESIDUAL (MG/L)			4.6	3.6	0.046*	0/1

*Daily Maximum Limit

SMITHFIELD 1986 -1999 DATA



Operations & Maintenance

The town and its contractor completed a number of construction projects and upgrades at the facility. The staff also replaced underground storage tanks at the treatment facility and five pump stations. A number of process upsets contributed to higher than normal loadings from the facility.

1998 O&M Rating: 10 out of 10

1999 O&M Rating: 10 out of 10

1998 Laboratory Rating: 5 out of 5

1999 Laboratory Rating: 5 out of 5

Overall O&M Rating: Excellent

1998 SLUDGE DISPOSAL METHOD

Incineration (Cranston)

SLUDGE PRODUCED

526 DRY TONS

1999 SLUDGE DISPOSAL METHOD

Incineration (Cranston)

SLUDGE PRODUCED

591 DRY TONS

Smithfield sludge is disposed of at the Cranston incinerator.